NOTE: The document identifier and heading have been changed on this page to reflect that this is a performance specification. There are no other changes to this document. The document identifier on subsequent pages has not been changed, but will be changed the next time this document is revised.

INCH-POUND

MIL-PRF-27/288A
17 May 1990
SUPERSEDING
MIL-T-27/288
8 April 1980

PERFORMANCE SPECIFICATION SHEET

TRANSFORMERS AND INDUCTORS
(AUDIO, POWER AND HIGH-POWER PULSE)
INDUCTORS, POWER, TF5S04ZZ

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and the issue of the following specification listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation: MIL-T-27.

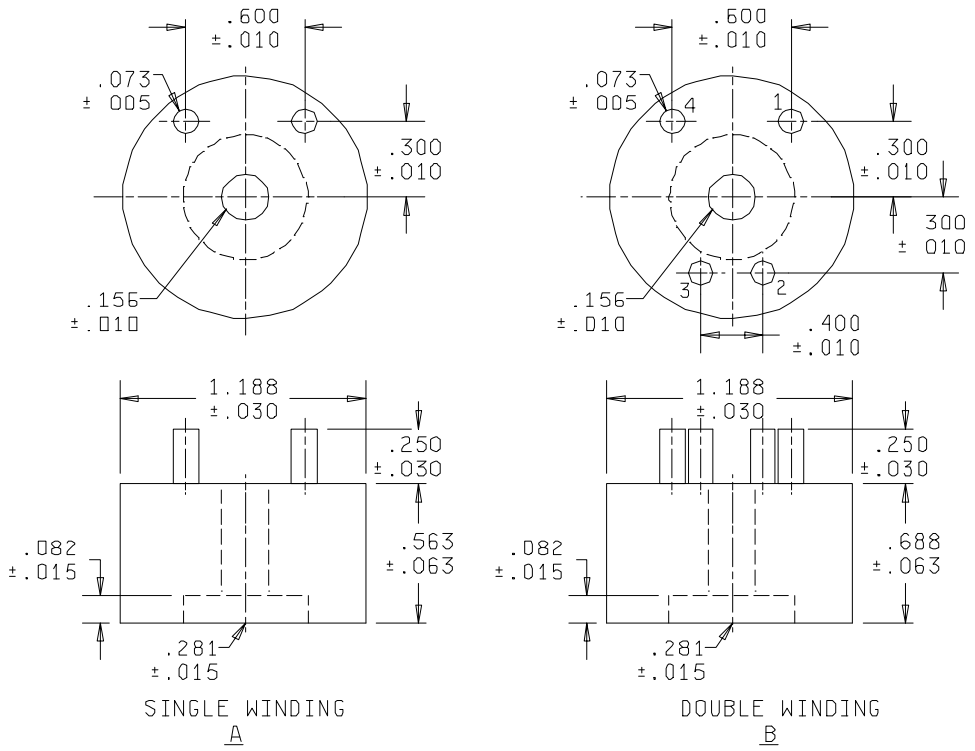
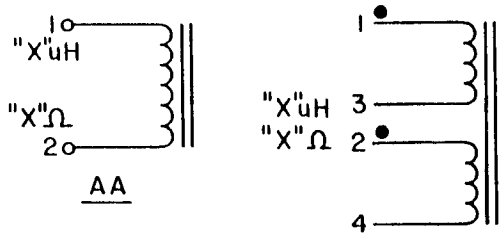


FIGURE 1. Dimensions and configurations.

(A) denotes changes

Inches	mm	Inches	mm
.005	0.13	.250	6.35
.010	0.25	.281	7.14
.015	0.38	.300	7.62
.030	0.76	.400	10.16
.063	1.60	.563	14.30
.073	1.85	.600	15.24
.082	2.08	.688	17.48
.156	3.96	1.188	30.18



WV-357V
(SEE TABLE I FOR VALUE OF "X")
CIRCUIT DIAGRAM AND MARKING

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Marking shall be on the side and on top.
4. Electrical values shall be marked as specified in table I, as applicable.
5. Circuit diagram BB, for series connection join terminals 2 and 3 for parallel connection join terminals 1 and 2, 3 and 4.

FIGURE 1. Dimensions and configuration – Continued.

REQUIREMENTS: (When numbers in parentheses, i.e., (1-2) are used, they indicate the winding and the extreme terminals of the winding.)

Electrical ratings: See table I.

TABLE I. Electrical ratings.

Dash number 1/	Inductance (µh) +15 percent -5 percent 2/ 3/	DC current (A) max 2/ 4/	DC resistance (ohms) max 2/	Working voltage (peak) volts 5/	PIN arrangement (see figure 1)	Circuit diagram (see figure 1)	Voltage
01	3000	1.2	1.2	357	A	AA	1 volt at 10 kHz
02	2000	1.5	.8	357	A	AA	1 volt at 10 kHz
03	1200	1.88	.5	357	A	AA	1 volt at 10 kHz
04	780	2.4	.3	357	A	AA	1 volt at 10 kHz
05	520	3	.2	357	A	AA	1 volt at 10 kHz
06	320	3.75	.13	357	A	AA	1 volt at 10 kHz
07	220 / 55	4.5 / 9	.08 / .02	357	B	BB	1 volt at 10 kHz
08	120 / 30	6 / 12	.05 / .013	357	B	BB	1 volt at 10 kHz
09	80 / 30	7.5 / 15	.032 / .008	357	B	BB	1 volt at 10 kHz

1/ Qualification test and approval to M27/288-01, shall be sufficient to grant qualification approval to M27/288-02 through -09.
2/ Where electrical values are written one above the other they indicate the values from series or parallel connections respectively $\frac{\text{(series)}}{\text{parallel}}$.
3/ The inductance is measured with 0 A dc applied at the specified voltage and frequency.
4/ At rated dc current, inductance will exceed 80 of rated inductance.
5/ Between windings, 50 volts peak.

Design and construction:

Dimensions and configuration: See figure 1.

Duty cycle: Continuous.

Case: Epoxy.

Terminals: Printed circuit (tinned brass).

Weight: 1.5 ounces.

Altitude: 75,000 feet, maximum.

Operating temperature range: -55°C to +130°C.

Terminal strength: MIL-STD-202, method 211, test condition A, 2 pounds.

Dielectric withstanding voltage:

At sea level: 1,000 volts rms.

At reduced barometric pressure: 500 volts rms.

Vibration (high frequency): MIL-STD-202, method 204.

Temperature rise: +45°C with 1 volt rms, 10 kHz, current as specified in table I at an ambient temperature of +85°C maximum.

Marking location: See figure 1.

Part or identifying number (PIN): M27/288- (dash number from table I).

CONCLUDING MATERIAL

Custodians:
Army - ER
Navy - EC
Air Force - 85

Review activities:
Army - MI
Navy - OS, SH
Air Force - 11, 17, 99
DLA - ES

User activities:
Army - AR
Navy - AS, MC
Air Force - 19

Preparing activity:
Army - ER

Agent:
DLA - ES

(Project 5950-0749-02)